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ABSTRACT

Applied linguistics has made major contributions to literacy teaching in recent years, in four general areas. First, second language acquisition is becoming the model for first language literacy teaching in schools through the "whole language approach" to literacy. Second, the field of sociolinguistics has convinced educators that literacy is a social achievement and that literacy abilities are acquired by individuals only in the course of participation in socially organized activities. Third, the way in which children learn oral language is a model for all language learning, including literacy. Fourth, pragmatics and study of the functional aspects of language development have revealed that the situational and contextual demands on language delineate the linguistic requirements, which establish register and mode of discourse. These contributions are examined as they apply to the three major components of literacy--reading, writing, and response to text, especially to literature. (MSE)

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# LINGUISTICS AND LITERACY TEACHING

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ABSTRACT

There is probably no more widely publicized topic in education today than literacy. Literacy, it seems, is the major contribution that schooling makes to the educated graduate. Yet literacy is typically narrowly defined as reading and writing skills, without the benefit of contributions from current research and pedagogy to the teaching of literacy. In this paper an expanded concept of literacy is offered along with contributions that the study of linguistics has made to literacy teaching over the past decade in particular.

# LINGUISTICS AND LITERACY TEACHING

## Introduction

Literacy is a very important topic in the western world these days. Politicians harangue us with statements about the poor literacy skills of school graduates; public media conduct surveys and "discover", as did a national newspaper chain in Canada, that one quarter of the nation's adults are illiterate. Unfortunately, the term 'literacy' is used loosely by many people who talk and write about it. The Canadian national newspaper study confused numeracy with literacy; politicians often include speaking as part of literacy. But for educators the term 'literacy' is particularly useful because it brings together the two language concepts and processes of reading and writing, which up to the 1980s were treated quite separately in curriculum, pedagogy, and research. In fact one of the major contributions to first language education has been the developmental merging of reading and writing under the rubric of 'literacy'.

In this paper I explore some contributions of linguistics to literacy teaching. I see these contributions as having a profound effect on how curricula for literacy acquisition and development are produced, how instruction in classrooms is conducted, and how instructional materials are developed and selected. My discussion will range across the kindergarten to grade twelve spectrum with more emphasis given the elementary years because these earlier years, to about age twelve, are those during which most literacy development occurs.

In broad terms I see the major contributions of linguistics occurring in four general areas. First, second language acquisition is becoming the model for first language literacy teaching in schools through what has become known

as the 'whole language approach' to literacy. The type of second language acquisition that provides the best model is that of second language immersion instruction which originated in Canada in the late 1960s.

Second is the contribution of sociolinguistics which has convinced educators that literacy is a social achievement, and that literacy abilities are acquired by individuals only in the course of participation in socially organized activities. Defining literacy, therefore, becomes a matter of assessing what counts as literacy in contemporary society in some given social context. Another way of putting this is that there are levels of literacy that coexist and that each is important according to the cultural and social situation in which it operates.

My third point is that how children learn oral language is a model for all language learning including literacy. In a very real sense educators can no longer separate the language concepts of oracy and literacy in terms of language acquisition and development. The work of Vygotsky (1962, 1978) on the interrelationships between language and thought requires that we consider the concept of inner speech as an internalizing of oracy, and as a vital part in the ongoing genesis and development of literacy. Literacy is never attained, rather it is constantly expanded and broadened. Hence definitions of literacy that involve listings of skills inevitably limit literacy to a predetermined level of development. The process of literacy development tends to be open in the possibilities for attainment it presents an individual. Thus written discourse cannot be contained by descriptions of rhetoric, else there could not be developments in literature.

A fourth point pays tribute to the contributions of pragmatics and functional aspects of language development. The situational and contextual demands made on language delineate the linguistic requirements which in turn

establish register (oral levels of usage) and mode of discourse (written language modes). Changing the situational and contextual aspects of communication is a powerful means for having learners develop an increasing repertoire of levels of usage and modes of discourse. As students move through school they become metalinguistically more aware of the language requirements of register and mode of discourse in terms of vocabulary, syntax, logical structure, coherence, cohesion, voice, tone, and so on.

To describe these contributions at work in literacy curriculum and instruction I turn to a discussion of what constitutes the "new literacy", namely reading, writing, and responding to literature. The latter I include because really it is an extension of the reading process, and it comes into its own especially in the middle and secondary years, that is, from the seventh grade onward.

Let's begin with reading, for the development of reading skill is believed still to be central to almost every aspect of educational pursuit in schools.

## Reading

Reading as the most important educational goal has shifted from a skills-dominated approach to one which considers the reading act as a process in which the reader brings as much or more knowledge to the text than he or she finds in the text. This shift from a decoding to a meaning model owes much to sociolinguistics with its emphasis on cultural and social roles in literacy learning, but recognition is also due reader-response theory.

Important also to an understanding of the reading process is Bruner's work (1973, 1986) on children's conceptual development. He argued that conceptual development is characterized by gradually more sophisticated representations of the world rather than by the gradual acquisition of separately identifiable

skills that do not necessarily occur in a sequence as the process unfolds. The shift away from identification of isolated skills for literacy allows for consideration of ways in which students' topical, structural, and pragmatic knowledge affects the processes of reading and writing. Educators now realize that a fair burden of knowledge rests on the shoulders of a good reader, and although students and others read to acquire knowledge, in fact much more knowledge goes into reading a text in school than emerges from a decoded text.

What, then, is this knowledge that goes into reading a text? Some knowledge concerns the concepts and content included in a text; in other words, students must know something about the subject before they can read a text. (Note that 'reading' means far more than decoding in this discussion. Reading also means comprehension and the development of meaning.) Other knowledge brought to the text involves vocabulary, morphology, grammatical and syntactic conventions. Linguistic knowledge is transformed into a skill that is applied to a text, such as decoding the text. It is the use of this knowledge that underlies the act of using contexts to determine meaning.

Skills acquired from prior linguistic and conceptual knowledge form the focus for reading instruction in the early years of school, wherein each of the acts becomes an activity. Alan Purves (1986) argues that in the later years another set of skills becomes the focus, those directed at what is called the comprehension or derivation of meaning from a text. In short, "meaning" is used to describe "the paraphrasable content of a text, the author's intentions in writing the text, the consensual interpretation derived by experts, and the average interpretations of a large number of readers and any consensual reading by a designated group" (Purves, 1986, p. 93). This definition invokes the ideas of an interpretive community and reader response theory which I will return to later.

The knowledge that readers bring to texts becomes an expectation for what will occur in text (content), and how it will be presented (linguistic conventions and structural organization). In other words, readers come to expect what text will contain and how text is organized from their accumulated knowledge and experience of listening and reading; they bring expectations to new texts. Expectation is vitally important to the act of reading. The student learns from context, including linguistic utterance, situation, and purpose, that certain vocabulary and syntactic patterns occur. These repeated occurrences become the basis for the student's expectation of what will occur linguistically in similar contexts. As contexts change, new patterns emerge and different sets of expectations are established. This ability to derive textual expectations occurs in natural language situations without the benefit of direct instruction.

When readers derive or make meaning, they follow certain strategies and apply various schemata to texts. These schemata are the consolidated expectations developed by readers; they involve conventions and frameworks, and concern both the content and form of the text. In school reading, such application of schemata becomes an activity.

Expectation also extends to text organization. Competent readers know that narrative is organized differently to description and exposition, and when they pick up a novel they expect and are prepared for certain organizational features that are characteristic of storytelling. Text organization can mean relationships between and among sentences or between and among longer segments of discourse. Research on story grammars informs educators that a sequence of events makes up a story episode and includes such concepts as setting, initiating event, and conflict (Mandler & Johnson, 1977; Rumelhart, 1975; Stein & Glenn, 1979; Thorndyke, 1977). Research on

smaller units of text, called propositions, explains that organization of the propositions of a text characterizes the structure of the text that forms as a reader reads (Frederiksen, 1975; Kintsch, 1974; Meyer, 1975). Another branch of research has explored the notion that the coherence of texts affects their comprehensibility (Frederiksen, 1981).

Research such as that on story grammars, propositions in texts, and text coherence recognizes that the reader brings meaning to a text and derives expectations with respect to content and organization. Reading problems can often be traced to weaknesses in how texts are organized and written because such texts violate the expectations that readers bring to them. For example, Beck & McKeown (1986, pp. 74-75) found problems at three levels of text - words, events and relations - that fell into three categories. The first category consisted of problems with the surface form of the text, such as difficult references, or omitted grammatical categories. The second area was the knowledge assumed by the text, such as the use of a word or event sequence that demanded knowledge likely to be unfamiliar to the learner. The third problem category was the nature of the content, such as implied events, ambiguous words, or poorly drawn relationships between events.

Alan Purves describes the potential literacy achievement of students in the following manner:

1. The capacity to decode, comprehend, and talk and write in preferred modes about a variety of texts, dealing with a variety of subjects, in a variety of genres and styles, having greater or lesser degrees of allusion to a larger body of literacy, and having a variety of connotative or tonal qualities;
2. The willingness to perform these acts and operations both in and out of school;

3. The readiness to see that these acts and operations have value and that there are degrees and qualities in texts that have been determined by custom. (Purves, 1986, p. 100)

Purves' wide-reaching definition of literacy recognizes social and cultural roles in literacy development, and heeds the necessity to begin with knowledge the reader brings to any act of reading.

He further adds a cautionary note for educators evaluating reading competence in schools. Though reading is essentially an internal act that is solitary and private, achievement in school demands a variety of forms of utterance and exposition concerning this internal act. When educators measure the potential achievement of students they can never be entirely sure they are measuring reading skill; they may be measuring expository skills. Purves concluded from National Assessment of Educational Progress studies conducted nationally that by age 17, a large proportion of students in United States schools have the skills of reading but tend to lack the expository writing ability that is demanded by school reading. Hence educators do not know whether this is a failure in reading or in writing, but it is a problem in literacy learning. Very few assessments of reading have paid attention to the issue of prior knowledge in the construction of measures.

## Writing

Writing is another major component of literacy. Writing comprises not merely the development of syntactic abilities but the cognitive and conceptual abilities of deciding what one writes, how one organizes ideas, and what rhetorical structures to use. These concerns depend upon the purpose, function, and audience for writing. During the past ten years research on writing has shifted dramatically from a skills to a process orientation. The

skills orientation relied heavily on grammar as a means through which students would develop writing skills. Abundant research since the 1960s has shown that instruction in analytic and discrete grammar skills has no effect on writing ability, and in fact time spent on teaching and learning grammar, be it traditional grammar, descriptive grammar, or transformational-generative grammar, has a negative effect because it takes time away from actual student writing.

Borrowing largely from research techniques applied by sociolinguists, writing researchers have moved toward naturalistic observation of a relatively homogeneous population (Graves, 1983), and toward comparative study of groups in social and cultural settings (Heath, 1983). Naturalistic and observational studies attempt to look at the psycholinguistic and sociolinguistic processes that occur as writers go from the initial decision to write, be it self-initiated or teacher-initiated, to the final product.

Findings of such research translated into pedagogy have given great impetus to a process approach to writing. This process approach employs stages or phases such as prewriting or rehearsal (deciding what to write, choosing the topic, making notes, researching information, gathering ideas, thoughts, data), writing or drafting (writing a first draft, deciding on audience and purpose, making initial rhetorical decisions), and postwriting or revision (revising, rewriting, attending to grammatical, syntactic, spelling, capitalization, and punctuation conventions). Between the writing and postwriting phrases there is sharing of and response to first drafts among writers, usually peers, leading to the revision phase or second draft. Response and sharing might be repeated resulting in three or more drafts before the final copy.

Some researchers and theorists are concerned about what they see as unquestioning wholesale acceptance and application of the process approach. They argue, rightly so, that a process versus product orientation to writing presents a false dichotomy for both research and pedagogy, and that the aim of the process approach is in fact to have writers produce a final written product that is the best writing they are capable of. Research sheds light on this problem.

George Hillocks (1986) conducted an integrative review or meta-analysis of all experimental studies on writing completed from 1963 through 1982. The most common and widespread mode of teaching writing was the presentational mode, where the instructor dominated all activity, with students acting as passive recipients of rules, advice, and examples of good writing. This mode was the least effective mode examined. At the other extreme was the natural process mode, the one that most closely resembles what Hillocks calls a "free process approach," one in which the instructor encourages students to write for other students, to receive comments from them, and to revise their drafts in light of comments from both students and the instructor. The natural process mode was about 25 per cent less effective than the average experimental treatment, but about 50 per cent more effective than the presentational mode.

Hillocks labelled the most effective mode of instruction "environmental" because it brought the teacher, student, and materials more nearly into balance than did other modes. In this mode the instructor plans and uses activities that result in high levels of student interaction concerning particular problems parallel to those they encounter in certain kinds of writing, such as generating criteria and examples to develop extended definitions of concepts, or generating arguable assertions from appropriate

data, and predicting and countering opposing arguments. The environmental mode places priority on structured problem-solving activities, and on high levels of student involvement. On pretest-to-posttest measures, the environmental mode was four times more effective than the traditional presentational mode and three times more effective than the natural process mode.

What might make a "free process approach", in Hillock's words, less effective than other approaches to the teaching of writing? Hillocks offers no explanations, though I believe that the reason lies not in the process approach to writing but in the ways in which teachers interpret their roles in a process approach. Where teachers see little responsibility themselves for guiding student writing the process approach has limited potential for developing students' writing abilities. Teachers must establish a role for themselves at each stage of the writing process, and need to exercise their knowledge of writing and their abilities as a writer and a teacher. Teachers, too, need to see themselves as role models of both a writer and as a mentor in the community of writers which is the classroom.

The role of prior knowledge - what the writer brings to the writing process - is just as important in writing as it is in reading. In recent analyses of problem-solving behaviour and story-understanding strategies (Brown, Bransford, Ferrara, and Campione, 1983; Glaser, 1984; Larkin, 1980; Mandler, 1983; Stein, 1983), distinctions are made between two types of knowledge: declarative and procedural. Declarative knowledge represents the types of factual knowledge that are required during the course of development. Procedural knowledge represents the schemes or structures used to access and organize factural knowledge. In other words, procedural knowledge is representative of knowing <u>how</u> to do something, whereas declarative knowledge

is representative of knowing that something is true in reference to a particular concept (Mandler, 1983).

Stein (1986, p. 194) makes a second distinction within the declarative knowledge domain, especially in reference to the development of writing skills. It may be possible to have students focus on three different types of knowledge during the writing process: linguistic knowledge, genre-specific knowledge, and domain-specific knowledge. Linguistic knowledge includes knowledge of syntax, spelling, and punctuation. Genre knowledge focuses on the knowledge that defines different forms of discourse (e.g. stories, descriptions, opinion essays, explanations). Content-domain knowledge refers to the specific information used to write different types of prose. Divisions in content knowledge can correspond to categories of knowledge about people, places, objects, physical events, and so forth. Another way of conceptualizing domain-specific knowledge is according to subject matter (e.g. mathematics, social studies, physics, chemistry). The role of the teacher in the writing process is to guide the student in those content domain-specific areas of subject matter and their appropriate and customary discourse and modes of expression.

One further area of linguistic contribution to writing is that of research on young children's development of spelling. We now know that children's spelling development follows the pattern of oral language acquisition in phonology and that early spelling uses single consonants to represent whole words. Gradually, as more graphomorphenic schema are developed for consonants and vowels, children incorporate these into their invented spellings. Their invented spellings gradually approximate and then match conventional spelling. Always children make graphomorphemic predictions and use the phonetic representations at their disposal to shape the spellings they invent. Never

are children impeded by lack of ability to spell. Such knowledge has drastically altered the way eductors perceive error and development and error in spelling.

Responding to Literature

Another aspect of literacy I have called responding to literature. It is a natural extension of the reading process incorporating the important roles of prior knowledge and expectations brought to the act of reading by the reader. Research has helped us understand how students read and respond to literature in two ways. One focuses on how students respond to books, the other on how patterns of response lead to an understanding of interpretive communities. Both areas of research owe much to methodologies developed and applied in sociolinguistics such as naturalistic and observational study.

We now know that students aged from about 10 to 18 respond in characteristic ways to various types of literature and that these ways are predictable and correlate with conceptual, cognitive, moral, and aesthetic levels of development (Protherough, 1983; Thomson, 1987; Wilkinson, Barnsley, Hanna, & Swan, 1980). Educators also know that students develop literary discriminatory frameworks which are increasingly similar to those of the established literary critical theorists, and that these are developed through reading experience rather than by direct teaching (Davis, 1985, p. 228). Furthermore, direct teaching towards a literary framework may be counter-productive if the developing reader has insufficient reading experience to internalize the criteria being taught and may, in effect, see the criteria as representative of features to be avoided in literature.

It seems likely that the development of literary discriminatory ability is a process which begins with the earliest childhood experiences of literature

and continues, where reading continues to be encouraged, through the developing reader's schooling without any essential need for formal teaching. Where reading is not a feature of early childhood experience it is less likely that discriminatory ability will develop in later childhood.

The other area of research on response deals with styles of response. Purves and Rippere (1968) found that by the end of secondary school, students in the United States and other countries had developed a "style of response" that was independent of the text. Style of response was clearly related to the country in which the student lived and to the style of response preferred by the teacher. This finding clearly supports the claim by Stanley Fish (1980) that readers become members of interpretive communities, which may be as small as a single classroom but tend to have certain common elements across classrooms that suggest a consensus of communities within a country. As an aspect of style of response, students tend to learn that certain criteria for selecting texts are preferred; they are aware of the standards of the community that calls one kind of literature trash and another kind classics.

Another type of preferred style of response acquired in school is the capacity to enter into what Louise Rosenblatt (1978) has called an "aesthetic transaction" with a text. Rosenblatt distinguishes between an "aesthetic" and "efferent" reading, the latter implying that the reader takes something away from the text and that the text is instrument. In short, it is reading for information. Efferent reading is demanded in science and social studies for example, but not usually in the English class. An "aesthetic" reading implies that the reader enter into the text as a participant; the text is an end. The reader brings different expectations to a text depending upon whether the text is seen as having aesthetic or informational content. These expectations, reader roles, and styles of response are all part of literacy learning.

## Conclusion

I have attempted in this discussion to highlight the contributions of linguistics to literacy teaching by looking at what I see as the three major components of literacy, namely reading, writing, and response to text, especially literature. There are many other contributions that I have omitted, not because they are unimportant, but because of the need to be concise. It is clear that the influence of linguistics on the development of literacy has been profound. English educators have applied findings from research in psycholinguistics, sociolinguistics, pragmatics, coherence and cohesion, and related fields to pedagogy and, equally important, to research in the area of literacy. It is common now in literacy studies to see research methodologies which focus on investigating how learners produce the language they do in the situations in which such language occurs. Educational researchers now know that it is essential to investigate the process through which language users arrive at the language product, and how the various contextual constraints and choices determine their linguistic selections.

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